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**Plague**

**Fact Sheet**

**Missouri Department of Health and Senior Services, Suspect Plague Case  
Investigation Form**

**Record of Investigation of Communicable Disease (CD-2)**

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## Plague

### **Overview** <sup>(1,2)</sup>

For a complete description of plague, refer to the following texts:

- Control of Communicable Diseases Manual (CCDM).
- Red Book, Report of the Committee on Infectious Diseases.

***Plague is a potential bioterrorism weapon. The key identifying sign for pneumonic plague is the acute onset of a bloody, productive cough in an otherwise healthy individual. If you suspect that you are dealing with a bioterrorism situation (simultaneous multiple cases reinforce this suspicion), contact your Regional Communicable Disease Coordinator and consult your emergency procedure manual.***

### **Case Definition** <sup>(3)</sup>

#### ***Clinical description***

Plague is transmitted to humans by fleas or by direct exposure to infected tissues or respiratory droplets; the disease is characterized by fever, chills, headache, malaise, prostration, and leukocytosis that manifests in one or more of the following principal clinical forms:

- Regional lymphadenitis (bubonic plague)
- Septicemia without an evident bubo (septicemic plague)
- Plague pneumonia, resulting from hematogenous spread in bubonic or septicemic cases (secondary pneumonic plague) or inhalation of infectious droplets (primary pneumonic plague)
- Pharyngitis and cervical lymphadenitis resulting from exposure to larger infectious droplets or ingestion of infected tissues (pharyngeal plague)


#### ***Laboratory criteria for diagnosis***

##### ***Confirmatory:***

- Isolation of *Yersinia pestis* from a clinical specimen or
- Fourfold or greater change in serum antibody titer to *Y. pestis* fraction 1 (F1) antigen

##### ***Presumptive:***

- Elevated serum antibody titer(s) to *Y. pestis* F1 antigen (without documented fourfold or greater change) in a patient with no history of plague vaccination or
- Detection of F1 antigen in a clinical specimen by fluorescent assay

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### ***Case classification***

*Confirmed:* a clinically compatible case with confirmatory laboratory results

*Probable:* a clinically compatible case with presumptive laboratory results

*Suspected:* a clinically compatible case without presumptive or confirmatory laboratory results

### **Information Needed for Investigation**

- **Verify the diagnosis.** Determine the vaccination status of the case (a vaccine is available, but because it is not recommended for routine immunization, it is unlikely the case will have been vaccinated). What laboratory tests were conducted? What were the results? What laboratory conducted the testing and what is their phone number? What are the patient's clinical symptoms? What is the name and phone number of the attending physician?
- **Contact the Regional Communicable Disease Coordinator immediately.**
- **Establish the extent of the illness.** Determine if household members, travelling companions, co-workers, or other close contacts are, or have been ill. Obtain the names, addresses, and phone numbers of contacts.

### **Case/Contact Follow Up And Control Measures**


#### **If terrorist activity is suspected:**

- Contact appropriate law enforcement authorities.
- Contact the Regional Communicable Disease Coordinator.
- Complete the "Missouri Department of Health and Senior Services, Suspect Plague Case Investigation Form." This form is included in this Section.

#### **General follow-up:**

- Determine the source of the infection.
- What is the occupation of the case? Would other co-workers be at risk of acquiring plague?
- Determine if household members, travelling companions, co-workers, or other close contacts require treatment or prophylaxis.
- Review recent travel history of case. For ten days prior to onset of illness obtain the date of departure, destinations, length of stay, routes, activities, or other details that would identify the time and location of infection.

**NOTE:** Because plague is not endemic in Missouri, the occurrence of a case necessitates that bioterrorism *must* be considered. If the case has a remarkable travel history or is employed in an occupation that is prone to exposure, a bioterrorism event may be less likely, but the occurrence of a single case of plague *must still be reported immediately* to

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the Regional Communicable Disease Coordinator. As part of the follow-up and in order to determine if the case resulted from a bioterrorist event, determine **all** activities of the case within the previous ten days, particularly attendance at events with large numbers of people.

### Control Measures

See the Control of Communicable Diseases Manual, Plague, “Methods of control.”

See the Red Book, Plague, “Control Measures.”

Centers for Disease Control and Prevention. Prevention of Plague – Recommendations of the Advisory Committee on Immunization Practices (ACIP) <sup>4</sup>.

### General:

- Identify symptomatic and close contacts of pneumonic plague cases and ensure that they seek medical treatment immediately.
- Determine if health-care workers were exposed and evaluate the need for chemoprophylaxis.


### Laboratory Procedures

Plague is characterized by massive growth of *Y. pestis* in tissues. The organism has a bipolar (safety-pin) appearance and can be visualized either with Wayson staining or Gram staining of infected tissue.

- A fluorescent antibody test for the presence of *Y. pestis* performed directly from infected tissue, bubo aspirate, sputum, CSF or blood specimen is available at the Missouri State Public Health Laboratory (SPHL). A positive direct fluorescent antibody test is presumptive evidence of *Y. pestis*.
- Specimens (listed above) can also be cultured for the presence of the organism. Culture isolates suspected of being *Y. pestis* should be submitted to the SPHL for confirmation and forwarding to the CDC.
- A single positive serologic test by passive hemagglutination assay or enzyme immunoassay in an unvaccinated patient who has not previously had plague also provides presumptive evidence of infection. Seroconversion and/or a fourfold difference in antibody titer between two serum specimens obtained 4 weeks to 3 months apart provides serological confirmation.

Additional information on laboratory procedures can be obtained from the Regional Communicable Disease Coordinator or from the SPHL web site at:

<http://www.dhss.state.mo.us/Lab/index.htm>. (5 May 2003)

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## **Reporting Requirements**

*Plague* is a Category I(B) disease and shall be reported to the local health authority or to the Missouri Department of Health and Senior Services (DHSS) within 24 hours of first knowledge or suspicion by telephone, facsimile or other rapid communication. Since *Y. pestis* is a potential agent of bioterrorism, DHSS urges reporting cases (suspect, probable, or confirmed) as soon as possible.


1. For all cases of plague, complete a “DHSS Disease Case Report” form (CD-1).
2. For non-bioterrorism cases of plague, complete a “Record of Investigation of Communicable Disease” form (CD-2).
3. Entry of the completed CD-1 into MOHSIS negates the need for the paper CD-1 to be forwarded to the Regional Health Office.
4. Send the completed secondary investigation form to the Regional Health Office.
5. All outbreaks or “suspected” outbreaks must be reported as soon as possible (by phone, fax, or e-mail) to the Regional Communicable Disease Coordinator. This can be accomplished by completing the Missouri Outbreak Surveillance Report (CD-51).
6. Within 90 days from the conclusion of an outbreak, submit the final outbreak report to the Regional Communicable Disease Coordinator.

## **References**

1. Chin, James, Ed. “Plague.” Control of Communicable Diseases Manual. 17<sup>th</sup> ed. Washington, DC: American Public Health Association, 2000: 381 - 387.
2. American Academy of Pediatrics. “Plague.” In: Pickering, LK., ed. 2000 Red Book: Report of the Committee on Infectious Diseases, 25<sup>th</sup> ed. Elk Grove Village, IL. 2000: 450 - 452.
3. Centers for Disease Control and Prevention. Case Definitions for Infectious Conditions Under Public Health Surveillance. MMWR 1997; 46 (No. RR-10). “Plague,” 1996, [http://www.cdc.gov/epo/dphsi/casedef/plague\\_current.htm](http://www.cdc.gov/epo/dphsi/casedef/plague_current.htm) (5 May 2003).
4. Centers for Disease Control and Prevention. Prevention of Plague – Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 1996;45 No. RR-14: 1-15. <http://www.cdc.gov/mmwr/PDF/RR/RR4514.pdf> (5 May 2003).

## **Other Sources of Information**

1. Butler, Thomas. “Yersinia Species (Including Plague).” Eds. Gerald L. Mandell, John E. Bennett, & Raphael Dolin, Eds. Principles and Practice of Infectious Diseases, 5<sup>th</sup> ed. New York: Churchill Livingstone, 2000: 2406-2414.
2. Lederberg, Joshua. “Biological Warfare and Bioterrorism.” Eds. Gerald L. Mandell, John E. Bennett, & Raphael Dolin, Eds. Principles and Practice of Infectious Diseases, 5<sup>th</sup> ed. New York: Churchill Livingstone, 2000: 3235-3238.

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3. Poland, Jack D. and David T. Dennis. "Plague." Bacterial Infections of Humans Epidemiology and Control, 3<sup>rd</sup> ed. Eds. Alfred S. Evans and Philip S. Brachman. New York: Plenum, 1998: 545 – 558.
4. Risi, George F. "Plague (*Yersinia pestis*)." APIC Infection Control and Applied Epidemiology Principles and Practice. Ed. Russell N. Olmsted. St. Louis: Mosby, 1996: 72-1–72-3.
5. The Merck Veterinary Manual. 8<sup>th</sup> Ed. Ed. Susan E. Aiello. Whitehouse Station, NJ: Merck & Co., Inc., 1998: 485-486, 2161, 2164.  
<http://www.merckvetmanual.com/mvm/index.jsp> (search "plague"). (5 May 2003)

### **Web Sites**

1. Centers for Disease Control and Prevention. "CDC Plague Home Page." June, 2001.  
<http://www.cdc.gov/ncidod/dvbid/plague/index.htm> (5 May 2003).
2. Centers for Disease Control and Prevention. "Public Health Emergency Preparedness and Response - Plague Information." January 2003.  
<http://www.bt.cdc.gov/agent/plague/index.asp> (5 May 2003).

# **Plague**

## **(Bubonic Plague, Pneumonic Plague)**

### **FACT SHEET**

#### **What is plague?**

Plague is a serious illness caused by a bacterium called *Yersinia pestis*. The disease is carried by rodents (e.g., rats, mice, ground squirrels) and can be transmitted by fleas to humans as well as to other animals. Plague is very rare in the United States, but cases are still reported in the southwestern states of New Mexico, Arizona, Colorado, Nevada, and California. **Bubonic plague** is the most common form and affects the body's lymph nodes. When the infection involves the lungs, the disease is called **pneumonic plague**.

#### **How do people get plague?**

People can get plague from the bite of infected fleas or by a scratch or bite while handling infected animals. You can also get it by breathing in air-borne droplets from people who have the plague infection in their lungs or from infected household pets.

#### **What are the symptoms of plague?**

The first symptoms of bubonic plague include the sudden onset of fever with painful swelling of the lymph nodes, called buboes, in the areas closest to the flea bite (typically, in the groin, armpit, or neck). Chills, muscle aches, weakness, fatigue, nausea, and headache may also occur. If the infection spreads to the lungs, it produces pneumonia that is highly contagious and often, fatal. Pneumonic plague is characterized by fever, swelling of lymph nodes, cough, chest pain, and frequently, blood in the saliva.

#### **When do symptoms start?**

The symptoms of bubonic plague begin 1 to 7 days following the bite of an infected flea. The incubation period for primary plague pneumonia is usually 1 to 4 days.

#### **What is the treatment for plague?**

Antibiotics can be prescribed by a doctor to treat plague. It is extremely important to detect and treat the disease early in its course. If left untreated, about half of those with bubonic plague and 100% of those with pneumonic plague will die. Prompt antibiotic treatment and supportive therapy can reduce the case-fatality rate. Persons who are infected with pneumonic plague should be strictly isolated with precautions against airborne spread until 48 hours of appropriate antibiotic therapy have been completed and there has been a favorable clinical response.

### **How can people avoid getting plague?**

Avoid rodent-infested areas, if possible. If you go to areas where plague is endemic (an ongoing problem), take precautions to protect yourself against rodents and their fleas.

Avoid contact with sick or dead animals found on the roadside or in the woods. The risk of being bitten by infected fleas is high when plague infection kills large numbers of rodents. The infected and starving fleas aggressively look for new hosts.

Carefully supervise the activities of all children and household pets (i.e., dogs and cats) when outdoors in forest/picnic areas where rodents make their nests.

International travelers to a plague-endemic area (areas reported to have an ongoing plague problem) are generally at low risk for infection for *Y. pestis*. If you are travelling to a plague-endemic area call your doctor or the local public health agency for advice.

Report all suspected plague cases promptly to the local public health agency.

**Missouri Department of Health and Senior Services  
Section for Communicable Disease Prevention  
Phone: (866) 628-9891 or (573) 751-6113**



**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

<b>Today's date:</b> ____/____/____			<b>ID :</b> _____		
<b>Patient name</b> <b>First</b> _____ <b>Last</b> _____					
<b>Sex:</b> <input type="checkbox"/> Male <input type="checkbox"/> Female		<b>Date of birth:</b> ____/____/____		<b>Age:</b> _____	
<b>Home address:</b>		<b>Zip:</b>		<b>Phone 1:</b>	
<b>City/Borough:</b>		<b>County::</b>		<b>Phone 2:</b>	
<b>Employer:</b>		<b>Occupation:</b>		<b>Work location:</b>	
<b>Work address:</b>		<b>Zip:</b>		<b>Phone:</b>	
<b>City/Borough</b>		<b>County:</b>			
<b>Any recent travel outside of MO?</b> Y    N    Unknown <b>If yes, where and when:</b>					

<b>MEDICAL HISTORY:</b>		<b>Dr.'s name and contact info:</b>	
<p>Has patient experienced any of the following symptoms for the first time since _____?</p> <p><i>(Circle one answer for each symptom)</i></p> <p>New onset skin lesions (i.e., rash, papule, ucler, vesicle, pustule, purpuric lesions)?</p> <p style="text-align: center;">Y    N    Unknown</p> <p style="text-align: right;">Onset date: ____/____/____</p>			

Location of lesion(s):		Initial description:		Progression:	
		Date	Notes	Date	Notes
Itchy	Y N Unk				
Swollen	Y N Unk				
Painful	Y N Unk				
Oozing	Y N Unk				
Satellite blisters	Y N Unk				
Eschar	Y N Unk				
Surrounding Edema	Y N Unk				

<b>Fever</b>	Y    N    Unknown	<b>If yes, max temp:</b> ____ F	<b>Onset date:</b> ____/____/____
<b>Chills</b>	Y    N    Unknown		<b>Onset date:</b> ____/____/____
<b>Malaise</b>	Y    N    Unknown		<b>Onset date:</b> ____/____/____
<b>Muscle aches</b>	Y    N    Unknown		<b>Onset date:</b> ____/____/____
<b>Headache</b>	Y    N    Unknown		<b>Onset date:</b> ____/____/____
<b>Severe</b>	Y    N    Unknown		
<b>Pharyngitis</b>	Y    N    Unknown		<b>Onset date:</b> ____/____/____

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

<b>Cough</b>	Y   N   Unknown				Onset date: ____/____/____
	<input type="checkbox"/> Productive	<input type="checkbox"/> Bloody			
<b>Chest pain</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Shortness of breath</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Cyanosis</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Respiratory distress</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Abdominal pain</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Nausea/vomiting</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Diarrhea</b>	Y   N   Unknown	Onset date: ____/____/____			
	<input type="checkbox"/> Bloody				
<b>Lymphadenopathy</b>	Y   N   Unknown	If yes, where? _____	Onset date: ____/____/____		
<b>Bubo(es)</b>	Y   N   Unknown	If yes, where? _____	Onset date: ____/____/____		
<b>Hepatomegaly</b>	Y   N   Unknown	Onset date: ____/____/____			
<input type="checkbox"/> Tender					
<b>Splenomegaly</b>	Y   N   Unknown	Onset date: ____/____/____			
<input type="checkbox"/> Tender					
<b>Sepsis</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Shock</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Meningitis</b>	Y   N   Unknown	Onset date: ____/____/____			
<input type="checkbox"/> Hemorrhagic					
<b>Necrotic Appendages</b>	Y   N   Unknown	Onset date: ____/____/____			
<b>Other signs/symptoms:</b>					

Care:	Name and Location	Date of visit/consult:	Comments
<input type="checkbox"/> Admitted to hospital:	_____		
<input type="checkbox"/> Seen by PMD:	_____		
<input type="checkbox"/> Seen by Derm:	_____		
<input type="checkbox"/> Seen by ID:	_____		
<input type="checkbox"/> Other	_____		

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

<b>Antibiotics given?</b> Y   N   Unknown <b>If yes, give name:</b> _____ _____ <b>Dose:</b> _____ <b>Start date:</b> _____ <b>Stop date:</b> _____	<b>Other Treatment given?</b> Y   N   Unknown <b>If yes, describe:</b> _____ _____
<b>Current clinical status</b> <input type="checkbox"/> Improved <input type="checkbox"/> No change <input type="checkbox"/> Worsened <input type="checkbox"/> Back to baseline	
<b>Describe progression:</b>   	
<b>Disposition</b> <input type="checkbox"/> Discharged <input type="checkbox"/> Admitted to ward <input type="checkbox"/> Admitted to ICU <input type="checkbox"/> Outpatient <input type="checkbox"/> Died If died, date of death      ____ / ____ / ____	
<b>Current diagnosis</b> <input type="checkbox"/> Primary Pneumonic Plague <input type="checkbox"/> Secondary Pneumonic Plague <input type="checkbox"/> Septicemic Plague <input type="checkbox"/> Bubonic Plague <input type="checkbox"/> Pneumonia of Unknown Etiology <input type="checkbox"/> Other (specify) _____ _____	

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

<b>LABORATORY SPECIMENS OBTAINED:</b>				
Blood/serum	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
Tracheal/lung aspirate	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
Sputum	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
Skin biopsy or skin lesion material	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
Bubo aspirate	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
CSF	Y	N	Unknown	Status: <input type="checkbox"/> at hospital <input type="checkbox"/> sent to SPHL <input type="checkbox"/> sent to CDC
Other	Describe:			
Specimens available now?		Y   N   Unknown		
If yes, what is available and where?				

LAB RESULTS:					
Specimen	Date Obtained	Test Ordered	Laboratory	Result	Current Location of Specimen
Blood/serum					
Tracheal/lung aspirate					
Sputum					
Skin biopsy or skin lesion material					
Bubo aspirate					
CSF					
Other, specify					
Other, specify					
Other, specify					

<b>OTHER DIAGNOSTIC TESTS:</b>	
Chest x-ray	Y   N   Unknown
If yes, describe findings:	
Other	Describe:

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

ENVIRONMENTAL SAMPLING/TESTING			
<b>Location of Specimen</b>	<input type="checkbox"/> Residence	<input type="checkbox"/> Work Place	<input type="checkbox"/> Other, specify _____
<b>Type of Specimen(s)</b>			
<b>Where was specimen(s) collected</b>			
<b>Date(s) collected</b>			
<b>Type of test(s) performed</b>			
<b>Result(s) of test(s)</b>			
<b>Date(s) of test result(s)</b>			
<b>Name of laboratory performing test(s)</b>			
<b>Address of Laboratory performing test(s)</b>			
<b>Telephone number of laboratory performing test(s)</b>			

**POTENTIAL RISK EXPOSURES**

YES NO UNK

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Occupational Associated With Animals</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Own Pets</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Contact With Animals</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Contact With Cats</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Contact With Rats, Mice, Ground Squirrels, Prairie Dogs or Chipmunks</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Presence of Rats or Mice in Home or Place of Work</b> If yes, describe _____

**OTHER POTENTIAL RISK EXPOSURES IN THE 10 DAYS PRIOR TO ONSET OF SIGNS/SYMPTOMS**

YES NO UNK

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Presence of Rats or Mice in Any Locations Visited in the 10 Days Prior to Onset of Signs/Symptoms</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Hunting Trips</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Hiking Trips</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Camping Trips</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Contact With Unusual Powders, Dusts, or Aerosols</b> If yes, describe _____
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Any Unusual Occurrences</b> If yes, describe _____

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

**ACTIVITIES DURING THE TEN DAYS PRIOR TO ONSET OF SIGNS/SYMPTOMS**

This section of the questionnaire should be completed for activities that took place at a second residence, at work, during recent travel outside home town or city, at sporting events, at religious meetings, at recreational events, at volunteer activities, at other meetings/events, at other outdoor activities and while doing hobby activities.

<b>Month</b>																													
<b>Date for past ten days →</b>																													
<b>Day of the week* →</b>																													
<b>Residence 2 (e.g., vacation home)</b> Location (address):																													
<b>Work 1:</b> Location: Shift: % time outdoors:																													
<b>Work 2:</b> Location: Shift: % time outdoors:																													
<b>Recent travel 1 outside home town or city</b> describe:	Location:																												
<b>Recent travel 2 outside home town or city</b> describe:	Location:																												
<b>Sporting Event 1</b> describe:	Location:																												
<b>Sporting Event 2</b> , describe:	Location:																												
<b>Religious Meeting 1</b> , describe:	Location:																												

\*Use following acronyms: S=Sunday, M=Monday, T=Tuesday, W=Wednesday, Th=Thursday, F=Friday and Sa=Saturday.

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

<b>Date for past ten days →</b>																						
<b>Day of the week* →</b>																						
<b>Religious Meeting 2</b> , describe:	Location:																					
<b>Recreational Event 1</b> , describe:	Location:																					
<b>Recreational Event 2</b> , describe:	Location:																					
<b>Volunteer Activity 1</b> , describe:	Location:																					
<b>Volunteer Activity 2</b> , describe:	Location:																					
<b>Other Meetings/Events 1</b> , describe:	Location:																					
<b>Other Meetings/Events 2</b> , describe:	Location:																					
<b>Other Outdoor Activity 1</b> , describe:	Location:																					
<b>Other Outdoor Activity 2</b> , describe:	Location:																					
<b>Hobby Activity 1</b> , describe:	Location:																					
<b>Hobby Activity 2</b> , describe:	Location:																					

\*Use following acronyms: S=Sunday, M=Monday, T=Tuesday, W=Wednesday, Th=Thursday, F=Friday and Sa=Saturday.

**MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES  
SUSPECT PLAGUE CASE INVESTIGATION FORM**

**ASSOCIATED CASES**

YES NO UNK

☐ ☐ ☐ **Contact (within 10 days of onset of illness) With Persons With a Febrile, Flu-Like, and/or Respiratory Illness**

Name(s) \_\_\_\_\_

Address(es) or Other Locating Information \_\_\_\_\_

Description of Illness(es) \_\_\_\_\_

Date(s) of Onset (if known) \_\_\_\_\_

☐ ☐ ☐ **Patient/Family Aware of Other Persons With a Febrile, Flu-Like, and/or Respiratory Illness**

Name(s) \_\_\_\_\_

Address(es) or Other Locating Information \_\_\_\_\_

Description of Illness(es) \_\_\_\_\_

Date(s) of Onset (if known) \_\_\_\_\_

☐ ☐ ☐ **Other Associated Cases**

Number \_\_\_\_\_

Describe Association With Patient \_\_\_\_\_

**Name of person completing form:**

**Phone:**

1. **Phone and Fax numbers at Missouri Department of Health and Senior Services (MDHSS): Ph: 1-800-392-0272, FAX: 573-751-6041**
2. **If further information becomes available on this patient, ask them to call the Division of Environmental Health and Communicable Disease Prevention (573-751-6000) during business hours, or after hours, call Department Emergency Response Management Center (1-800-392-0272) and ask for the on call officer**
3. **If there are any questions by the provider re: prophylaxis or specimen preparation, refer them to or fax them the appropriate MDHSS Alert**



MISSOURI DEPARTMENT OF HEALTH

RECORD OF INVESTIGATION OF COMMUNICABLE DISEASE\*

Patient's Name				FOR CODING ONLY			
Address		City		State		Zip Code	
Birth / /	Sex <input type="checkbox"/> M <input type="checkbox"/> F	Race <input type="checkbox"/> W <input type="checkbox"/> N <input type="checkbox"/> Other		County of Residence			
Parent's Name If Not Adult				Phone			
Hospitalized <input type="checkbox"/> Yes <input type="checkbox"/> No		Hospital Name		Date of Onset			
Physician's Name				Phone Number			
Address				Date			
Previous Address (if significant)				Date Moved			
Place Employed or School Attended				Occupation			
Date Reported		How did you first learn of this case?				Date	

Disease \_\_\_\_\_ ☐ Confirmed or ☐ Suspected } at beginning of investigation.

Chief Clinical Symptoms with Dates: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Treatment (type, amount, dates): \_\_\_\_\_  
 \_\_\_\_\_

DIAGNOSTIC LABORATORY TESTS ON PATIENT			
Type of Specimen	Date Collected	Result	Name of Laboratory

Are there other associated cases? \_\_\_\_\_ If yes, how many, and how associated? \_\_\_\_\_

Household Sanitation: ☐ Good ☐ Fair ☐ Poor      Milk Supply \_\_\_\_\_  
 Water Supply \_\_\_\_\_

(Continued on reverse side)

\* Special forms should be used for investigations of Diphtheria (CD 2A), Encephalitis or Meningitis (CD 2B), Enteric Infections (CD 2C), and Foodborne Outbreaks (CD 2D).

Other Pertinent Epidemiological Data (exposure to birds and animals, insect bites, vaccination, travel, etc.): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

CONTACTS (Household and Other)

Name and Address	Age / Sex	Relation to Patient	Similar Illness? Onset Date	Laboratory Specimen	Date Collected	Result

Narrative and Follow-up Notes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Probable Source \_\_\_\_\_

☐ Recovered    ☐ Died    Date of Death \_\_\_\_\_ Cause of Death \_\_\_\_\_

Investigated by \_\_\_\_\_ Final Diagnosis \_\_\_\_\_

Name of Agency \_\_\_\_\_ Date \_\_\_\_\_